

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

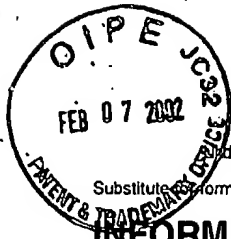
Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.



Substitute for Form 1449 A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number : 09/868,682

Filing Date: 02/08/1999

First Named Inventor: Nichols

Group Art Unit: *wa-2121*

Examiner Name: *wa-JP/arc*

Attorney Docket Number: 05222.00159

(Use as many sheets as necessary)

Sheet 1 of 14

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Words, or Figures Apparent
		Number - Kind Code ² (if known)			
<i>H</i>		US-4,622,013	11/11/1986	Cherchio	
<i>H</i>		US-4,874,784	10/17/1989	Clancey	
<i>H</i>		US-4,981,766	01/02/1990	Derr, et al.	
<i>H</i>		US-4,931,950	06/05/1990	Isle, et al.	
<i>H</i>		US-4,964,077	10/16/1990	Eisen, et al.	
<i>H</i>		US-4,977,529	12/11/1990	Gregg, et al.	
<i>H</i>		US-5,002,491	03/26/1991	Abrahamson, et al.	
<i>H</i>		US-5,170,464	12/08/1992	Hayes, et al.	
<i>H</i>		US-5,189,402	02/23/1993	Naimark, et al.	
<i>H</i>		US-5,208,745	05/04/1993	Quentin, et al.	
<i>H</i>		US-5,208,898	05/04/1993	Funabashi, et al.	
<i>H</i>		US-5,239,617	08/24/1993	Gardner, et al.	
<i>H</i>		US-5,259,766	11/09/1993	Sack et al.	
<i>H</i>		US-5,267,865	12/07/1993	Lee, et al.	
<i>H</i>		US-5,310,349	05/10/1994	Daniels, et al.	
<i>H</i>		US-5,311,422	05/10/1994	Loftin, et al.	
<i>H</i>		US-5,317,688	05/31/1994	Watson, et al.	
<i>H</i>		US-5,326,270	07/05/1994	Ostby, et al.	
<i>H</i>		US-5,359,701	10/25/1994	Chiang, et al.	
<i>H</i>		US-5,372,507	12/13/1994	Goleh	

FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Apparent
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)			
		EP 0 689 132 A2	12/27/95	Laffra	
		EP-0 710-942 A2	05/08/96	Siefert	
		EP-0 710-942-A2	05/08/96	Siefert	
		EP-0-798-655-A2	10/01/97	Jervis, et al.	
		WO-00/04478	01/27/00	Jonsson	
		WO-97/44766	11/27/97	Cook	
		WO-98/03953	01/29/98	Simmons	
		WO-98/25251	06/11/98	Ho	
		WO-98/32109	07/23/98	De Lange	

Examiner
Signature

Date
Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



PTO/SB/08A (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
to respond to a collection of information unless it contains a valid OMB control number.

Application Number : 09/868,682

Filing Date: 02/08/1999
First Named Inventor: Nichols

Group Art Unit: n/a- 2/21
Examiner Name: n/a
Attorney Docket Number: 05222.00/59

(Use as many sheets as necessary)

Sheet 2 of 14

SEP 17 2002

Technology Center 2100

U.S. PATENT DOCUMENTS

U.S. PATENT DOCUMENTS					
Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
A		US-5,395,243	03/07/1995	Lutbin, et al.	
A		US- 5,441,415	08/15/1995	Lee, et al.	
H		US- 5,491,743	02/13/1996	Shilo, et al.	
H		US- 5,533,903	07/09/1996	Kennedy	
H		US- 5,535,422	07/09/1996	Chang, et al.	
H		US- 5,537,141	07/16/1996	Harper, et al.	
H		US- 5,539,869	07/23/1996	Spoto, et al.	
H		US- 5,566,291	10/15/1996	Boulton, et al.	
H		US- 5,576,844	11/19/1996	Anderson, et al.	
H		US- 5,577,186	11/19/1996	Mann II, et al.	
H		US- 5,597,312	01/28/1997	Bloom, et al.	
H		US- 5,618,033	04/01/1997	Kerwin	
A		US- 5,644,686	07/01/1997	Hekmatpour	
H		US- 5,644,727	07/01/1997	Atkins	
H		US- 5,673,369	09/30/1997	Kim	
H		US- 5,690,496	11/25/1997	Kennedy	
H		US- 5,696,885	12/09/1997	Hekmatpour	
H		US- 5,701,400	12/23/1997	Amado	
H		US- 5,720,007	02/17/1998	Hekmatpour	
H		US- 5,727,161	03/10/1998	Purcell, Jr.	

FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner
Signature**

Date Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark

PTO/SB/08A (10-201)

JUL 19 2002

RECEIVED



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.
Substitution of form 1449 A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number : 09/868,682

Filing Date: 02/08/1999

First Named Inventor: Nichols

Group Art Unit: 2101

Examiner Name: [redacted]

Attorney Docket Number: 05222.00159

(Use as many sheets as necessary)

Sheet 3 of 14

RECEIVED
SEP 17 2002

RECEIVED
APR 24 2002
Technology Center 2100

TECHNOLOGY CENTER R3700

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		"Evaluating the effectiveness of feedback in SQL-tutor", IEEE, proc. Int. workshop IWALT, pp 143-144	
		"Automated-Exercise Progression in Simulation-Based Training," IEEE Trans. On Systems, Man, and Cybernetics, Vol. 24(6), pp. 863-74, June 1994	
		"ACM-Transactions on Information Systems," 1988 at www.acm.org/pubs/loc/Abstracts/tois/59298.htm	
		The Virtual Classroom: Great Expectations. Delivering Graduate Education by Computer. Addison Wesley Longman, 1996.	
		"A Special Section -- Goal Based Scenarios: A New Approach to Professional Education: Reengineering Education at Andersen Consulting," Educational Technology, Nov.-Dec. 1994	
		"Goal-Based Scenarios and the Problem of Situated Learning: A Commentary on Andersen Consulting's Design of Goal-Based Scenarios," Educational Technology, Nov.-Dec. 1994	
		"DDD--A Free Graphical Front-End for UNIX Debuggers," Jan. 1996, ACM Sigplan Notices, Vol. 31, No. 1, pp. 22-27	
		"Automated-Training of Legal Reasoning" at http://www.bileta.ac.uk/94papers/muntjew.html	
		"The Virtual Learning Environment System," 28th Annual Frontiers in Education Conference, Conference Proceedings, Vol. 2, Nov. 4-7, 1998	
		"Developing a Design System into an Intelligent Tutoring System," Int'l J. Engr. Eud., Vol. 13(5), pp-341-46, Dec. 1997	
		"CAPTOR-a model for delivering web based intelligent tutoring system technology", IEEE Proc. DASC vol. 2, pp 5.C.4.1-5	

RECEIVED
NOV 29 2002

TECHNOLOGY CENTER R3700

RECEIVED
FEB 15 2002
TECHNOLOGY CENTER R3700

Examiner Signature		Date Considered	8/2/4
--------------------	--	-----------------	-------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

TECHNOLOGY CENTER R3700

SEP 10 2002

RECEIVED

RECEIVED
OCT 09 2002

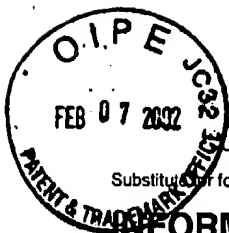
TECHNOLOGY CENTER R3700

RECEIVED

JUL 12 2002

GROUP 3600

RECEIVED
JUL 19 2002



Substitute for form 1449 A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number : 09/868,682

Filing Date : 02/08/1999

First Named Inventor: Nichols

Group Art Unit: n/a

Examiner Name: n/a

Attorney Docket Number: 05222-2002

RECEIVED

APR 24 2002

(Use as many sheets as necessary)

Sheet 4 of 14

TECHNOLOGY CENTER R3700 Technology Center 2100

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		"Bridging the Virtual and the Physical: The InterSim as a Collaborative Support Interface," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 556-58, Dec. 1997	
		"Task-Oriented Learning on the Web"; Innovations in Education and Training International, Vol. 36, No. 1, Feb. 1999	
		"Applications of BrainMaker-Neural Network to stocks, business, medical, manufacturing" at www.calsci.com/Applications.html	
		"KBLPS Overview" at www.cgi.com/CGIWEB/KBLPS/overIndex4.html	
		"Smartlaw: adapting classic expert system techniques for the legal research domain", ACM pp. 133-141	
		"Interactive Multimedia Instructs the Individual," Oct. 1994, Occupational Health & Safety, Vol. 63, No. 10, pp. 144-145	
		"Practical methods for automatically generating typed links", ACM Hypertext, pp 31-41	
		"Popular Theory Supporting the Use of Computer Simulation for Experiential Learning," http://www.centurionsys.com/rcl57.html , Aug. 1997	
		"Technical Report: Computer Aided Education and Training Initiative" at http://advlearn.lrdc.pitt.edu/advlearn/papers/FINALREP.html	
		"FRA: Teaching Financial Accounting with a Goal-Based Scenario," Intelligent Systems in Accounting, Finance and Management, Vol. 4, 1995	
		"Teaching Real-World Analysis Skills for Goal-Based Scenario," pp. 68-74	

Examiner Signature

Date Considered

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED
OCT 09 2002
TECHNOLOGY CENTER R3700

RECEIVED
JUL 19 2002
TECHNOLOGY CENTER R3700

RECEIVED
JUL 12 2002
GROUP 3000

RECEIVED
SEP 10 2002

FEB 07 2002

Substitute for Form 1449 A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 3 of 14

PTO/SB/08A (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
do not respond to a collection of information unless it contains a valid OMB control number.

Application Number : 09/868.682

Filing Date: 02/08/1999

First Named Inventor: Nichols

Group Art Unit: ~~n/a~~ 2.1'2.1

Examiner Name: n/a - J V HPL
Attorney Docket Number: 05228.00159

RECEIVED

APR 24 2002

Technology Center 2100

SEP 17 2002

U.S. PATENT DOCUMENTS CENTER R3700					
Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
A		US-5,727,950	03/17/1998	Cook, et al.	
H		US- 5,745,652	04/28/1998	Bigus	
H		US- 5,772,446	06/30/1998	Rosen	
H		US- 5,779,468	07/14/1998	Ho, et al.	
H		US- 5,788,508	08/04/1998	Lee, et al.	
A		US- 5,791,907	08/11/1998	Ramshaw, et al.	
H		US- 5,799,151	08/25/1998	Hoffer	
H		US- 5,799,292	08/25/1998	Hekmatpour	
H		US- 5,806,056	09/08/1998	Hekmatpour	
H		US- 5,810,747	09/22/1998	Brudney, et al.	
H		US- 5,822,745	10/13/1998	Hekmatpour	
H		US- 5,823,781	10/20/1998	Hitchcock, et al.	
H		US- 5,823,788	10/20/1998	Lemelson, et al.	
H		US- 5,835,683	11/10/1998	Corella, et al.	
H		US- 5,868,575	02/09/1999	Kuczewski	
H		US- 5,870,768	02/09/1999	Hekmatpour	
H		US- 5,875,437	02/23/1999	Atkins	
H		US- 5,889,845	03/30/1999	Staples, et al.	
H		US- 5,893,123	04/06/1999	Tuinenga	
H		US- 5,911,581	06/15/1999	Knight Jeremy, et al.	

[illegible]

Examiner Signature		Date Considered	8/2/4	TECH
-----------------------	---	--------------------	-------	------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

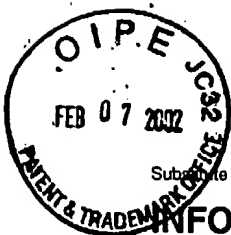
³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 If possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark

RECEIVED
SEP 10 2002

RECEIVED
JUL 19 2002

TECHNOLOGY CENTER 800-370-3333



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449 A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number : 09/868,682

Filing Date: 02/08/1999

First Named Inventor: Nichols

Group Art Unit: n/a

Examiner Name: n/a

Attorney Docket Number: 05222.00159

RECEIVED

APR 24 2002

Technology Center 2100

(Use as many sheets as necessary)

Sheet 6 of 14

SEP 17 2002

TECHNOLOGY CENTER R3700 OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		"Artificial Intelligence and Mathematics Education" at http://www.rand.org/hot/mcarthur/Papers/aied.html	
		"The Roles of Artificial Intelligence in Education: Current Progress and Future Prospects" at http://www.nib.unicamp.br/recursos...education/intelligent-tutoring.html	
		"WITS: A Reusable Architecture for a VR-Based ITS" at http://advlearn.lrdc.pitt.edu/its-arch/papers/tam.html	
		"Brainmaker" at www.npiec.on.ca/~echoscan/28-04.htm	
		"News for ESAP" at www.hops.wharton.upenn.edu/~esap/news.html	
		"Learning with Computers," May 1994, Accountancy Vol. 113, No. 1209, pp. 60-64	
		"User-Sensitive Multimedia Presentation System," March 1, 1996, Vol. 39, No. 3, pp. 93-94	
		"Microworlds and Simuworlds: Practice Fields for the Learning Organization," Spring 1996, Organizational Dynamics Vol. 24, No. 4, pp. 36-49	
		"What are Intelligent Coaching Systems and Why are they (In)evitable?" IEEE Colloquium on Artificial Intelligence in Educational Software, pp. 2/1-2/5, June 1998	
		"Development of an Integrated Simulator and Real Time Plant Information System," Advances in Operational Safety of Nuclear Power Plants, Proceedings of an International Symposium 1996.	

Examiner Signature		Date Considered	8/2/4
-----------------------	--	--------------------	-------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

+

RECEIVED
OCT 09 2002
TECHNOLOGY CENTER R3700

RECEIVED
JUL 12 2002
GROUP 3000

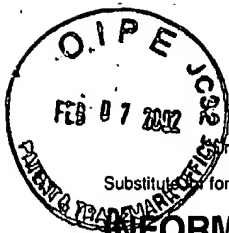
RECEIVED
JUL 19 2002
TECHNOLOGY CENTER R3700

RECEIVED

SEP 10 2002
TECHNOLOGY CENTER R3700

RECEIVED
MAY 21 2002
TECHNOLOGY CENTER R3700

TECHNOLOGY CENTER B3700



Substitute form 1449 A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number : 09/868,682

Filing Date: 02/08/1999

First Named Inventor: Nichols

Group Art Unit: n/a 2121

Examiner Name: n/a J P 412

Attorney Docket Number: 10522200159

RECEIVED

APR 24 2002

(Use as many sheets as necessary)

Sheet 8 of 14

SEP 17 2002 Technology Center 2100

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		"A Goal-Centered Architecture for Intelligent Tutoring Systems," Proc. Of 7th World Conf. On Artificial Intelligence in Education, pp. 307-314, Aug. 1995	
		"Smart Avatars in JackMOO," Proceedings of the 1999 IEEE Conference on Virtual Reality, pp. 156-63	
		"Embedding an Intelligent Tutoring System in a Business Gaming-Simulation Environment," Proc. Of the 1994 Winter Simulation Conference, pp. 1399-1406, Dec. 1994	
		"Evaluating Intelligent Tutoring with Gaming Simulations," Proc. Of the 1995 Winter Simulation Conf., pp. 1406-83, Dec. 1995	
		"Persistent Issues in the Application of Virtual Environment Systems to Training," August 1996, Proceedings. Third Annual Symposium on Human Interaction with Complex Systems, IEEE, pp. 124-32.	
		"The Lisp Tutor," Byte, pp. 159-75, Apr. 1985	
		"Pedagogical, natural language and knowledge engineering techniques in SOPHIE I, II, and III," in Intelligent Tutoring Systems, D. Sleeman & J.S. Brown eds., pp. 227-82, Dec. 1982	
		Interactive Multimedia Distance Learning (IMDL): The Prototype of the Virtual Classroom, 1994.	
		"Understanding Organizational Dynamics of IT-Enabled Change: A Multimedia Simulation Approach," Winter 1997/1998, Journal of Management Information Systems: JMIS, Vol. 14, No. 3, pp. 109-140.	
		"Intelligent Computer-Aided Instruction: A Survey Organized Around System Components," Jan. 1989, IEEE Inc., New York, Vol. 49, No. 1, pp. 40-57.	

Examiner Signature		Date Considered	8/2/4
--------------------	--	-----------------	-------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

+

RECEIVED
OCT 09 2002
TECHNOLOGY CENTER 2100

RECEIVED
JUL 19 2002
TECHNOLOGY CENTER 2100

RECEIVED
JUL 12 2002
GROUP 3600

PTO/SB/08A (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
to respond to a collection of information unless it contains a valid OMB control number.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.
Instructions for form 1449 A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number : 09/868,682

Filing Date: 02/08/1999

First Named Inventor: Nichols

Group Art Unit: n/a 217

Examiner Name: n/a

Attorney Docket Number: 0522200159

(Use as many sheets as necessary)

Sheet 10 of 14

RECEIVED

APR 24 2002

Technology Center 2100

SEP 17 2002

RECEIVED
OCT 09 2002
TECHNOLOGY CENTER R3700

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		"Conducting and Supporting a Goal-Based Scenario Learning Environment," Educational Technology, Nov.-Dec. 1994	
		"Interface design issue for advising giving expert systems", Comm. Of the ACM, vol 30, no. 1, pp14-31	
		"An Object-Oriented Architecture for Evolutional Development of Interactive Learning Environment with Coached Problem-Solving," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 592-94, Dec. 1997	
		"Architecture of an Intelligent Tutoring System on the WWW," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 39-46 Dec. 1997	
		"Socialized Collaborative Learning in Multimedia Virtual Worlds" URL: http://www.iscs.nus.edu.sg/labs/learning/els/VRML.html ; viewed Feb. 16, 1999	
		Flexible Learning; Feb. 1998; Credit Union Management Vol. 21, No. 2, pp. 32-33+	
		"Teaching Through Case-Based Reasoning: An ITS Engine Applied to Business Communication," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 111-18 Dec. 1997	
		"Train with Less Pain," Oct. 13, 1997, Informationweek No. 652, pp. 150-154	
		"Virtual Learning: A Revolutionary Approach to Building a Highly Skilled Workforce," Autumn 1998, Personnel Psychology Vol. 51, No. 3, pp. 767-71	
		"Intelligent Tutoring Systems: An Overview" at http://www.intellectbooks.com/authors/lawler/its.htm	

Examiner Signature		Date Considered	8/2/02
--------------------	--	-----------------	--------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED
NOV 29 2002
TECHNOLOGY CENTER R3700

TECHNOLOGY CENTER R3700

JUL 19 2002

RECEIVED

RECEIVED
JUL 12 2002
GROUP 0000



INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number : 09/868,682

Filing Date: 02/08/1999

First Named Inventor: Nichols

Group Art Unit: nva-212

Examiner Name: nva-212

Attorney Docket Number: 05222-00159

RECEIVED

APR 24 2002

Technology Center 2100

(Use as many sheets as necessary)

Sheet 11 of 14

SEP 17 2002

TECHNOLOGY CENTER R3700

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		"No More Boring CPE," July-1997, Accounting Technology, pp. 27-35	
		Computer Dictionary-1997, pp. 264, 276, 383, 446, 462, 507.	
		"Rule-Based Programming with OPS5" at www.mkp.com/books_catalog/O-934613-51-6.asp	
		"From Computer-Assisted Instruction to Intelligent Tutoring Systems," J. Artificial Intelligence in Education, V. 2(3), pp. 39-50, Dec. 1997	
		"MUSE U.S. Patents" at www.muser.com/html/patents.html	
		"Distributed Intelligent Tutoring on the Web," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 482-89, Dec. 1997	
		"RadTutor: The Theoretical and Empirical Basis for the Design of a Mammography Interpretation Tutor," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 386-393 Dec. 1997	
		"Using the Wizard of Oz Technique to Prototype a Scenario-Based Simulation Tutor," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 458-65, Dec. 1997	
		"Using Planning Techniques to Provide Feedback in Interactive Learning Environments," Proc. Sixth Int'l Conf. On Tools with Artificial Intelligence, pp. 700-03, Nov. 1994	
		"An Electronic Infrastructure for a Virtual University," Communications of the ACM, Vol. 40, No. 9, Sep. 1997.	
		"Simulation Technology and Parallelism in Learning Environments" at http://www.to.utwente.nl/pr/min/Book/chapter1.htm	

Examiner Signature

Date

Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

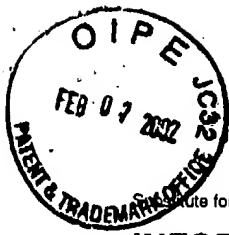
¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20230. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20230.

RECEIVED
OCT 09 2002
TECHNOLOGY CENTER R3700

RECEIVED
JUL 19 2002
TECHNOLOGY CENTER R3700

RECEIVED
JUL 12 2002
GROUP 3000



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.
Use for form 1449 A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number : 09/868,682

Filing Date : 02/08/1999

First Named Inventor: Nichols

Group Art Unit: rva 2136

Examiner Name: rva

Attorney Docket Number: 05222.00159

(Use as many sheets as necessary)

Sheet 12 of 14

RECEIVED
SEP 17 2002
TECHNOLOGY CENTER R3700

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		"Engines-for-Education"-URL:-http://www.ils.nwu.edu/~e_for_e/nodes/I-M-INTRO-ZOOMER-pg.html; viewed Feb. 15, 1999.	
		"FinPlan System" at www.rlat.org:ru/FinPlan/	
		"Enhancing Simulation Education with Intelligent Tutoring Systems," Proc. Of the 1996 Winter Simulation Conf., pp. 675-80, Dec. 1996	
		"Computer Aided Instruction for Statistics: A Knowledge-Based Systems Approach," Int'l J. of Computers in Adult Education and Training, Vol. 5(1), pp. 3-14.	
		"Teaching with the internet"-1998, JAI Press Inc., USA. Vol no. 3, pp 217-222	
		"Development of a Simulation-Based Intelligent Tutoring System for Assisting PID Control Learning," Jan. 1994, IEICE Transactions on Information and Systems, E77-D, No. 1, Tokyo Japan, pp. 108-17.	
		"Authoring Intelligent Tutoring Systems: An Analysis of the State of the Art" at http://www.cs.umass.edu/~tmurray/papers/ATSummary/AuthTools.html	
		"Multimedia Training "Get Lemonade, Not a Lemon" June 1997, Journal for Quality and Participation vol. 20, No. 3, pp. 22-26	
		"SMART-Evaluation:-Cognitive Diagnosis, Mastery Learning & Remediation," Proc. Of 7th World Conf. On Artificial Intelligence in Education, pp. 123-30, Aug. 1995	
		"Decision-Pro3.0" at www.vanguardsw.com/	

RECEIVED
NOV 29 2002

TECHNOLOGY CENTER R3700

RECEIVED
SEP 10 2002
TECHNOLOGY CENTER R3700

RECEIVED

Examiner Signature		Date Considered	8/2/98
--------------------	--	-----------------	--------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

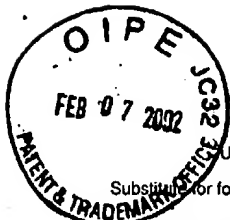
¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED
OCT 09 2002
TECHNOLOGY CENTER R3700

RECEIVED
JUL 19 2002
TECHNOLOGY CENTER R3700

RECEIVED
JUL 12 2002
GROUP 3000



Substituted for form 1449 A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number : 09/868,682

Filing Date: 02/08/1999

First Named Inventor: Nichols

Group Art Unit: ~~n/a~~ 2134

Examiner Name: ~~n/a~~ J B Hill

Attorney Docket Number: 05222.00159

(Use as many sheets as necessary)

Sheet 13 of 14

RECEIVED
SEP 17 2002
TECHNOLOGY CENTER R3700

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		"A-Fuzzy-Logic-Based-Intelligent-Tutoring-System," Information-Processing-92, Vol. II, pp. 66-72, Dec. 1992.	
		"The-SimQuest-Authoring-System-for-Simulation-Based-Discovery Learning," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 79-86, Dec. 1997	
		"A Browser-Based-System to Support & Deliver-DE," 28th Annual Frontiers in Education Conference, Conference Proceedings, Vol. 1, Nov. 4-7, 1998	
		"Goal-Based-Scenarios and Business-Training: A Conversation with Roger C. Schank," Educational Technology, Nov.-Dec. 1994	
		"Automate-Your-Business-Plan" at www.business-plan.com/screen2.html	
		"Kiplinger TaxCut Press Releases" at http://www.taxcut.com/taxcut/98press_releases/pr98_nowshipping.html	
		"TurboTax Deluxe Product Information" at http://www.intuit.com/turbotax/prodinfo/tldlx.html	
		"Why-Should-the-Teens-Have-All-the-Best-Games?...Management Skill with Oil, Health, Housing Games," Computergram Int'l, June 176, 1996	
		"Template-Software-Business-Simulator, Chapter 8, August 1997	
		"Template-Software-Workflow-Simulator; Chapter 8, June 1998	
		"Goal-Based-Scenarios"; Technical Report # 36; Northwestern University, The Institute for the Learning Sciences, December 1992, pp. 1-30	

RECEIVED
NOV 29 2002
TECHNOLOGY CENTER R3700

RECEIVED
APR 24 2002
Technology Center 2100

RECEIVED
SEP 10 2002
TECHNOLOGY CENTER R3700

Examiner Signature		Date Considered	8/2/98
--------------------	--	-----------------	--------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED
OCT 09 2002
TECHNOLOGY CENTER R3700

RECEIVED
JUL 19 2002
TECHNOLOGY CENTER R3700

RECEIVED
JUL 12 2002
GROUP 3600

FEB 07 2002

Substitute for Form 1449 A/PTO

PTO/SB/08A (10-01)
Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
do not respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number : 09/868.682

Filing Dat : 02/08/1999

First Named Inventor: Nichols

Group Art Unit: ~~n/a~~ 2121

Examiner Name: *wa*
Attorney Docket Number: 05222.00159

(Use as many sheets as necessary)

Sheet 14 of 14

RECEIVED
SEP 17 2002
TECHNOLOGY CENTER R3700

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

[illegible]

**Examiner
Signature**

Date
Considered

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.

shington, DC 20531.

RECEIVED
OCT 09 2002
TECHNOLOGY CENTER R3700

RECEIVED
JUL 19 2002
TECHNOLOGY CENTER R3700

RECEIVED
JUL 12 2002
GROUP 3000